

DISPLAYS

FAQ

Q Why must I clean my LCD projector's filters?

A LCD projectors contain filters that stop dust settling on their LCD panels and ruining the projected image. Unless you keep these clean, they may clog with dust and cause overheating.

The cleaning method varies slightly from model to model, but instructions are provided in the manual. Some manufacturers suggest that you clean the dust filter every 500 hours or so, as Sony does for its VPL-EX4 (see right). However, we'd recommend doing it every 300 hours or so. Once you remove the filter's cover, you'll find a cloth or sponge beneath. Remove this and clean it. If you wash it in water, make sure it is completely dry before you put it back in the projector.

Most DLP projectors don't have dust filters. The DLP chip is so small that there's a greater risk of clogged filters damaging the projector than of dust ruining image quality.

Lynley Oram

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SONY VPL-EX4

★★★★★

£492 inc VAT

Nearly all office projectors are grey, silver and black, with a boxy, industrial feel, but Sony's VPL-EX4 is quite stylish. It has a neat white top surface with a silver trim, and its rounded corners give it a much softer look.

Vents expel hot air through the front of the projector rather than the sides, which is more comfortable for viewers, as the projector is likely to be placed in the middle of a conference table, with the audience seated along the sides.

With a brightness of 2,100 ANSI lumens, the VPL-EX4 can display presentations clearly without you having to dim the lights. It has a short throw distance, which means you can get a reasonably large picture in a small room. At six feet (1.8 metres) from the screen it can project a 60in (152.4cm) picture. The projector has no DVI input, but it does have two VGA inputs, so you can connect two PCs. It also provides a monitor output, composite and S-video connectors and a 1W built-in speaker.

The VPL-EX4's 400:1 contrast ratio is average for an LCD business projector. However, in our tests we found that while we had bright whites, black areas looked slightly grey. It also had trouble displaying high-contrast images, and the projected image wasn't as sharply detailed as those from Dell's 1800MP (see 'Also consider...', below). There's no noise reduction, which results in speckling in moving images where there are large areas of a single colour, such as the sky. However, this is fairly normal for data projectors, and this projector isn't really designed for watching movies.



Otherwise, the VPL-EX4 did well in our performance tests. Colours were rich and bright, and whites were pure and clean. The projector reproduced the Windows desktop sharply at its native resolution of 1,024x768 and text was easy to read. It accepts a maximum resolution input of 1,400x1,050 and did a good job of scaling the image down.

Replacement lamps cost £235 and last for 2,000 hours. This results in rather expensive running costs of 12p per hour compared with Dell's 1800MP, which costs just 8p per hour. The VPL-EX4 has an ECO mode, however, which reduces the projector's brightness to a reasonable 1,500 ANSI lumens and increases the bulb life to 3,000 hours, lowering the running costs to 8p per hour.

Sony's VPL-EX4 is an attractive and versatile

projector that provides great image quality for business presentations. It's also £106 less than Dell's 1800MP, making it a good choice if you want a projector just for work. However, if you also want a projector that you can take home and use to watch movies, the 1800MP is a much better choice, as its higher contrast ratio makes watching movies a much more pleasant experience.

Lynley Oram

SUMMARY

- ✓ Good image quality
- ✓ Vents at front
- ✗ Poor contrast ratio

OFFICE PROJECTOR 3-LCD 1,024x768 native resolution, 400:1 contrast ratio, 2,100 ANSI lumens
PART CODE VPL-EX4
SUPPLIER www.oyyy.co.uk
DETAILS www.sony.co.uk

Also consider...

IYYAMA E1900S

★★★★★

£138 inc VAT

BEST BUY Iiyama's E1900S has an air of sophistication about it, and its image quality is excellent. Focus is good, and it did well at picking out detail in dark areas. Colours are realistic and rich but not over-saturated, and skin tones look natural. At this price, the E1900S is a bargain.



19in LCD 1,280x1,024 native resolution, D-sub, DVI, 3.5mm line in connectors, 5ms response time, 700:1 contrast ratio
PART CODE PLE1900S-B2S
SUPPLIER www.pixmania.co.uk
DETAILS www.iyyama.co.uk

✓ Inexpensive; crisp focus; natural, rich colours
FULL REVIEW Aug 2007

MIRAI DML-519W100

★★★★★

£100 inc VAT

BEST BUY Mirai's DML-519W100 displays sharp images and handled our greyscale transition test fairly well, with only a little banding at the lighter end of the gradient. Colours look natural. This is an inexpensive display, but it produces good image quality. It's a great buy if your budget is tight.



19in WIDESCREEN LCD 1,440x900 native resolution, D-sub, DVI, 3.5mm line in connectors, 8ms response time, 500:1 contrast ratio
PART CODE DML-519W100
SUPPLIER www.misco.co.uk
DETAILS www.mirai.eu

✓ Inexpensive; crisp focus and natural colours
FULL REVIEW Aug 2007

HANNSG HW223DP

★★★★★

£194 inc VAT

BEST BUY The HW223DP's brushed-silver surround and black stand look classy. The display supports HDCP, so it's great for HD video. An included adaptor allows a component video source to connect to the DVI input. It produces a clear, sharp image using both D-sub and DVI inputs, with colours that look rich and natural.



22in WIDESCREEN LCD 1,680x1,050 native resolution, D-sub, DVI, 3.5mm line in connectors, four-port USB2 hub, 5ms response time, 800:1 contrast ratio
PART CODE HW223DP
SUPPLIER www.misco.co.uk
DETAILS www.hannsg.co.uk
✓ Crisp focus; rich colours; component video input
FULL REVIEW Aug 2007

VIEWSONIC VX2255wmb

★★★★

£224 inc VAT

Viewsonic's glossy, piano-black VX2255wmb looks great, and it also comes in an iPod-like white. A 1.3-megapixel webcam is built into the middle of the surround at the top of the display, and there's a microphone to one side of the large power button at the bottom of the panel. A splitter cable with microphone and speaker connections on one end is also provided, which you can use with the confusingly named line-in port on the back of the monitor to channel audio from your sound card to the monitor's speakers, and from the microphone to the PC. There's also a headphone jack, a D-sub port and a DVI input that supports HDCP.

The webcam can take still images as well as recording video. Picture quality is reasonable, although it overcompensates a little for overhead office lighting, making lighter areas look washed out. The 2W speakers are positioned under the monitor rather than on the front. Although built-in speakers never sound particularly good, these are some of the worst we've heard. Even with the volume on both the PC and the monitor turned up full, they were barely audible. The narration on a video clip was hard to hear, and music sounded tinny and distorted at high volumes. We wouldn't use them for video conferencing.

The 22in display doesn't pivot, but you can adjust the screen elevation between 130mm and 250mm. A nifty plate on the bottom of the stand



means the monitor can rotate 360°. Like all the monitors we've seen of this size, this display has a native resolution of 1,680x1,050. The contrast ratio of 700:1 is slightly lower than that of HannsG's HW223DP (see 'Also consider...', below).

Images were crisp and sharp, but colours looked a little washed out, and blacks weren't as pure as we'd have liked. Movies and games didn't have the same impact as they do on other displays, such as the HW223DP. Although the VX2255wmb has a horizontal viewing angle of 170°, the picture quality deteriorated noticeably when we stepped to either side of the screen. This display is not suitable for a viewing audience of more than one.

The VX2255wmb is a stylish monitor with good features for a reasonable price, but its image quality just isn't good enough. Buying HannsG's HW223DP and a webcam from this month's Labs would be a better idea.

Lynley Oram

SUMMARY

- ✓ HDCP support
- ✓ Webcam
- ✗ Washed out colours

22IN WIDESCREEN LCD 1,680x1,050 native resolution, 700:1 contrast ratio, 5ms response time, DVI, D-sub, line-in, headphone connectors
PART CODE VX2255wmb
SUPPLIER www.morecomputers.co.uk
DETAILS www.viewsoniceurope.com/UK

CHOOSING A... Projector

Follow the steps to find your ideal specs

NATIVE RESOLUTION: 1,024x768

BRIGHTNESS: 1,000 ANSI lumens

CONTRAST RATIO: 500:1

LAMP LIFE: 2,000 hours

CHECK: Weight, throw distance, noise

Recommended minimum in grey

1 Low-cost projectors make two main sacrifices. The brightness, measured in ANSI lumens, will be relatively low and the native resolution will be limited to 1,024x768. Neither need be serious drawbacks if you want to use your projector for presentations or DVDs.

If you want to be ready for High Definition video, though, you'll need a projector with a resolution of at least 1,280x720 and either an HDMI port or HDCP-compliant DVI port.

2 Image quality is obviously important, but this is hard to assess from specifications alone. A high contrast ratio (over 500:1) adds depth to the picture and is one tangible benefit of projectors based on digital light processing (DLP) rather than the older LCD technology. The quality of the optics and colour balance cannot be gauged without consulting a review, though.

3 Consider where you'll be using your projector; size and weight are important if the unit will be moved around a lot. You should aim for under 3kg if portability is an issue. Small rooms demand a quiet (sub-33dB) projector and a flexible throw distance; this tells you how close or far away the screen can be. Most projectors can mirror or rotate their image to cope with ceiling mounting or rear projection.

4 Check that the projector can cope with all the signals you might want to feed it. Common video formats are supported by almost all projectors, but high-resolution VGA signals and HDMI aren't. Highly detailed slides will display at their best only on pricier projectors with a 1,280x1,024 native resolution.

5 The brightness of the projector will depend on where you need to use it. Projectors with 1,000 ANSI lumens are fine for darkened rooms, but for meeting rooms you should get a minimum of 1,300 ANSI lumens. Remember brighter projectors will cost more to run as their bulbs need replacing more often. An ECO mode reduces the brightness of the projector but increases bulb life.

DELL 1800MP

★★★★★

£598 inc VAT

BEST BUY Dell's 1800MP is a good all-round projector, and at this price it's a bargain. It has excellent image quality. Two D-sub VGA connectors allow it to connect to two PCs at once, so you can switch between two presenters.

If you want a projector for business, this is the best choice, and it's also suitable for watching movies.



OFFICE PROJECTOR DLP 1,024x768 native resolution, 2,000:1 contrast ratio, 2,100 ANSI lumens
PART CODE 1800MP
SUPPLIER www.digitaldirect.co.uk
DETAILS www.dell.co.uk ✓ Good contrast; superb image quality; minimal rainbow effect FULL REVIEW May 2007

LG 32LC2D

★★★★★

£480 inc VAT

BEST BUY LG's 32LC2D produces beautiful, realistic pictures. Images from our HD movie clips were perfect and the TV displayed every detail flawlessly. Connecting to a PC is easy through D-sub or HDMI and the picture was brilliant. It's excellent value, with a wide range of connections.



32in LCD HD TV VGA, HDMI, component, three SCART, optical S/PDIF, digital tuner PART CODE 32LC2D
SUPPLIER www.play.com
DETAILS <http://uk.lge.com> ✓ Superb all-round picture quality; good computer display FULL REVIEW Nov 2006

HITACHI Illumina PJ-TX300

★★★★★

£761 inc VAT

BEST BUY The glossy sheen on Hitachi's Illumina PJ-TX300 looks fabulous, but there's more to this projector than its good looks. The PJ-TX300 will show a high-quality 203cm image at two metres.

If you want a projector to show films, this is an ideal choice, and it's a bargain, too.



HOME CINEMA PROJECTOR 3-LCD, 1,280x720 native resolution, 10,000:1 contrast ratio, 1,200 ANSI lumens
PART CODE HITPRX63
SUPPLIER www.pixmania.co.uk
DETAILS www.hitachidigitalmedia.com
✓ Inexpensive; superb image quality; excellent contrast
FULL REVIEW May 2007